010325374 **Image available**
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**Film type electron emitters and image forming apparatus - has electroconducting film between opposing electrodes on substrate with film having high resistance emitter region**

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Patent Family:

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Abstract (Basic): EP 660357 A

The electron emitter has a pair of oppositely placed electrodes (5,6), with an electroconducting film (4) between. The film includes a high resistance region (3), principally containing a carbon deposit, acting as the electron emitting region. This may also be on the adjacent film. The device may be either a flat type surface conducting emitter, on a substrate (1), or a step type.

The carbon deposit may be close to the higher potential electrode and the electroconducting film formed of fine particles of metal, or metal oxide. The electrodes may be partly carbon deposit coated, of graphite, amorphous carbon or a mixture. The device may comprise a number of emitters in rows, with wiring at each end and the emitted electron beams modulated.

USE/ADVANTAGE - Flat panel displays, e.g. flat television. Stable electron emission, low energy consumption, easy control.

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Title Terms: FILM; TYPE; ELECTRON; EMITTER; IMAGE; FORMING; APPARATUS; ELECTROCONDUCTING; FILM; OPPOSED; ELECTRODE; SUBSTRATE; FILM; HIGH; RESISTANCE; EMITTER; REGION

Derwent Class: T04; V05

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International Patent Class (Additional): H01J-029/24; H01J-029/46; H01J-031/00; H01J-031/12; H01J-031/15

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